

**UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF MARYLAND  
GREENBELT DIVISION**

FACTOR 2 MULTIMEDIA SYSTEMS,  
LLC,  
5802 ORCHARD HILL LANE  
CLIFTON, VIRGINIA 20124

Plaintiff,

CIVIL ACTION NO. 8:25-cv-1431

v.

TOWER FEDERAL CREDIT UNION  
7901 SANDY SPRING ROAD  
LAUREL, MD 20707

Defendant.

**COMPLAINT FOR PATENT INFRINGEMENT**

1. Plaintiff Factor2 Multimedia Systems, LLC (Factor2), by and through its undersigned counsel, alleges as follows for its Complaint against Defendant Tower Federal Credit Union (TFCU).

**THE NATURE OF THIS ACTION**

2. Factor2 brings this action against TFCU pursuant to 35 U.S.C. § 101 et. seq. and §§ 271, 281, 283, 284, & 285 inclusive, for infringement of one or more claims of the following six patents, U.S. Patent Nos.:

8,281,129 “Direct Authentication System and Method Via Trusted Authenticators,”  
9,703,938 “Direct Authentication System and Method Via Trusted Authenticators,”  
9,727,864 “Centralized Identification and Authentication System and Method,”  
9,870,453 “Direct Authentication System and Method Via Trusted Authenticators,”  
10,083,285 “Direct Authentication System and Method Via Trusted Authenticators” and  
10,769,297 “Centralized Identification and Authentication System and Method.”

Collectively the “Patents-in-Suit.” Defendant has infringed the Patents-in-Suit, thereby necessitating this lawsuit.

3. Defendant has used, offered to sell, and sold and has profited from and charged access to the accused TFCU software, hardware and authentication process by customers throughout the United States. The TFCU accused method and Apparatus includes authentication that directly infringes the system and method claims of the Patents-in-Suit. The TFCU accused Apparatus includes a system that includes all of the elements of the system and apparatus claims and the accused method performs all of the elements of the method claims, and or utilizes a separate system for authentication that includes all of the elements of the system and apparatus claims and that performs all of the method claims. Defendant’s “use” of a built in or separate system directly infringed the claims of the Patents-in-Suit.

#### **THE PARTIES**

4. Plaintiff is a Virginia corporation having an address located at 5802 Orchard Hill Ln, Clifton, VA 20124-1061. Plaintiff is the owner of the Patents-in-Suit by assignment.

5. Defendant TFCU is a Maryland Corporation with a principal office at 7901 Sandy Spring Road, Laurel, MD 20707 and physical places of business in this judicial district. TFCU made, used, developed, offered to sell, and sold the accused products and systems and profited from and sold access to the accused products and profited from use of the accused products through advertisement revenue and the like, throughout the United States.

#### **JURISDICTION AND VENUE**

6. This is an action for patent infringement arising under the laws of the United States, 35 U.S.C. § 271 et seq.

7. This Court has subject matter jurisdiction over this action pursuant to 35 U.S.C. §§ 271, 281 and 28 U.S.C. §§ 1331 and 1338(a), federal question.

8. This Court has personal jurisdiction over Defendant TFCU because TFCU has a regular and established place of business in this district at 7901 Sandy Spring Road, Laurel, MD 20707 among multiple other locations in this district.

9. Venue is proper in this District for Defendant TFCU pursuant to 28 U.S.C. §§ 1400(a), 1400(b) and because Defendant TFCU maintains a regular and established place of business in this District and has committed acts of infringement in this district.

### **BACKGROUND AND GENERAL ALLEGATIONS**

10. Factor2 is the current assignee of the Patents-in-Suit

11. Defendant has used, implemented, provided, benefitted from and sold access to the accused TFCU apparatus which uses a system and method for authentication that infringes claims of each of the Patents-in-Suit.

### **THE PATENTS-IN-SUIT**

12. On October 2, 2012, United States Patent No. 8,281,129 (“the ’129 Patent”) titled “Direct Authentication System And Method Via Trusted Authenticators,” was duly and legally issued by the United States Patent and Trademark Office (“USPTO”). The ’129 Patent claims patent-eligible subject matter and is valid and enforceable. Factor2 is the exclusive owner by assignment of all rights, title, and interest in the ’129 Patent, including the right to bring this suit for damages, and including the right to sue and recover all past, present, and future damages for infringement of the ’129 Patent. Defendant is not licensed to the ’129 Patent, either expressly or implicitly, nor do they enjoy or benefit from any rights in or to the ’129 Patent whatsoever. A true and correct copy of the ’129 Patent is attached hereto as **Exhibit A**.

13. On July 11, 2017, United States Patent No. 9,703,938 (“the ’938 Patent”) titled “Direct Authentication System And Method Via Trusted Authenticators” was duly and legally issued by the United States Patent and Trademark Office (“USPTO”). The ’938 Patent claims

patent-eligible subject matter and is valid and enforceable. Factor2 is the exclusive owner by assignment of all rights, title, and interest in the '938 Patent, including the right to bring this suit for damages, and including the right to sue and recover all past, present, and future damages for infringement of the '938 Patent. Defendant is not licensed to the '938 Patent, either expressly or implicitly, nor do they enjoy or benefit from any rights in or to the '938 Patent whatsoever. A true and correct copy of the '938 Patent is attached hereto as **Exhibit B**.

14. On July 19, 2017, United States Patent No. 9,727,864 (“the '864 Patent”) titled “Centralized Identification and Authentication System and Method” was duly and legally issued by the United States Patent and Trademark Office (“USPTO”). The '864 Patent claims patent-eligible subject matter and is valid and enforceable. Factor2 is the exclusive owner by assignment of all rights, title, and interest in the '864 Patent, including the right to bring this suit for damages, and including the right to sue and recover all past, present, and future damages for infringement of the '864 Patent. Defendant is not licensed to the '864 Patent, either expressly or implicitly, nor do they enjoy or benefit from any rights in or to the '864 Patent whatsoever. A true and correct copy of the '864 Patent is attached hereto as **Exhibit C**.

15. On December 27, 2017, United States Patent No. 9,870,453 (“the '453 Patent”) titled “Direct Authentication System and Method Via Trusted Authenticators,” was duly and legally issued by the United States Patent and Trademark Office (“USPTO”). The '453 Patent claims patent-eligible subject matter and is valid and enforceable. Factor2 is the exclusive owner by assignment of all rights, title, and interest in the '453 Patent, including the right to bring this suit for damages, and including the right to sue and recover all past, present, and future damages for infringement of the '453 Patent. Defendant is not licensed to the '453 Patent, either expressly

or implicitly, nor do they enjoy or benefit from any rights in or to the '453 Patent whatsoever. A true and correct copy of the '453 Patent is attached hereto as **Exhibit D**.

16. On September 5, 2018, United States Patent No. 10,083,285 (“the '285 Patent”) titled “Direct Authentication System and Method Via Trusted Authenticators,” was duly and legally issued by the United States Patent and Trademark Office (“USPTO”). The '285 Patent claims patent-eligible subject matter and is valid and enforceable. Factor2 is the exclusive owner by assignment of all rights, title, and interest in the '285 Patent, including the right to bring this suit for damages, and including the right to sue and recover all past, present, and future damages for infringement of the '285 Patent. Defendant is not licensed to the '285 Patent, either expressly or implicitly, nor do they enjoy or benefit from any rights in or to the '285 Patent whatsoever. A true and correct copy of the '285 Patent is attached hereto as **Exhibit E**.

17. On August 19, 2020, United States Patent No. 10,769,297 (“the '297 Patent”) titled “Centralized Identification and Authentication System and Method.” was duly and legally issued by the United States Patent and Trademark Office (“USPTO”). The '297 Patent claims patent-eligible subject matter and is valid and enforceable. Factor2 is the exclusive owner by assignment of all rights, title, and interest in the '297 Patent, including the right to bring this suit for damages, and including the right to sue and recover all past, present, and future damages for infringement of the '297 Patent. Defendant is not licensed to the '297 Patent, either expressly or implicitly, nor do they enjoy or benefit from any rights in or to the '297 Patent whatsoever. A true and correct copy of the '297 Patent is attached hereto as **Exhibit F**.

18. Plaintiff has at all times complied with the requirements of 35 USC § 287.

19. The claims of the '297 Patent are an example of one of the Patents-in-Suit, but are

not representative of the family of patents. Claim 1 is directed to “[a]n authentication system for enhancing computer network security.” Claim 1 is an example, but is not representative of all of the claims of the ’297 Patent:

Claim 1. An authentication system for enhancing computer network security by authenticating a user in an electronic communication between a computing device of the user and an online computer system, the authentication system comprising one or more computing devices configured to perform operations comprising:

- while the online computer system is connected to the computing device of the user via a communication network, electronically receiving a request for a SecureCode; generating the SecureCode;

- while the online computer system is connected to the computing device of the user via the communication network, electronically providing to the user the SecureCode in response to the request for the SecureCode, wherein:

- the SecureCode is invalid after a predetermined time passes,

- the SecureCode is invalid after one use of the SecureCode for authentication, and

- the SecureCode is only valid for authenticating the user; and

- while the online computer system is connected to the computing device of the user via the communication network, electronically receiving from the online computer system a digital authentication request for authenticating the user, wherein:

- the digital authentication request comprises a digital identity of the user, and

- the digital identity includes the SecureCode; and

- while the online computer system is connected to the computing device of the user via the communication network, authenticating the user by evaluating a validity of the SecureCode included in the digital authentication request.

20. Method claim 1 of the ’129 Patent is an example of the Method Claims of the Patents in-Suit, but are not representative of the scope of the asserted method claims of the Patents-in-Suit. Claim 1 of the ’129 Patent recites:

Claim 1 A computer implemented method to authenticate an individual in communication with an entity over a communication network during a communication between the entity and the individual, the computer implemented method comprising:

- receiving electronically a request for a dynamic code for the individual, which request is received from the individual by a trusted-authenticators computer during an authentication of the individual by the entity:

- calculating by the trusted-authenticators computer the dynamic code for the individual in response to the request during the authentication of the individual by the entity, wherein the dynamic code is valid for a predefined time and becomes invalid after being used;

- sending by the trusted-authenticator’s computer electronically the dynamic code to the individual during the authentication of the individual by the entity:

receiving by the trusted-authenticator's computer electronically an authentication request from the entity to authenticate the individual based on a user information and the dynamic code included in the authentication request, wherein the entity receives the user information and the dynamic code from the individual; and

authenticating by the trusted-authenticator's computer an identity of the individual based on the user information and the dynamic code included in the authentication request, wherein the result of the authentication is provided to the entity.

## INFRINGEMENT

21. Defendant made, used and provided the TFCU System and Apparatus, (the Accused Product) which as referenced herein includes at least the internet website of the TFCU Apparatus, but also the back end systems and backbone which provides access and functionality to TFCU and distributes content and authenticates users on TFCU systems, the Accused Product infringes at least one claim of each of the Patents-in-Suit.

22. Defendant has, under 35 U.S.C. § 271(a), directly infringed, literally and/or under the doctrine of equivalents, one or more claims of the patents-in-suit, by making, using, testing, selling, offering for sale and/or importing into the United States Defendant's Accused Products.

23. Plaintiff has conducted a detailed analysis, establishing and confirming, on information and belief, that Defendant's Accused Products directly infringe claims of the Patents-in-Suit.

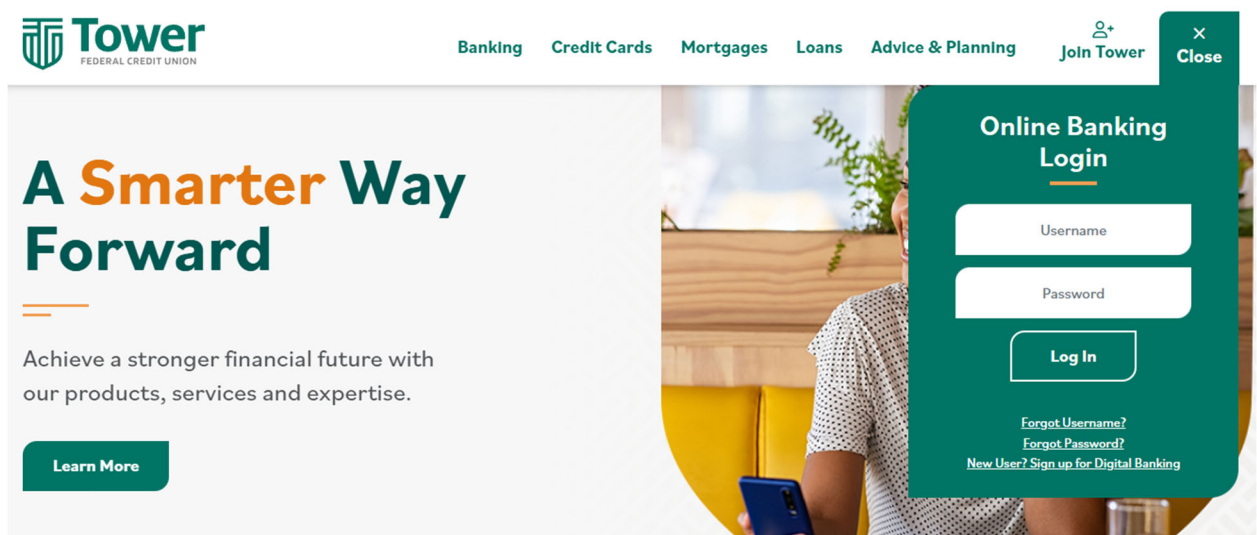
24. The TFCU Apparatus and/or method of operating the TFCU Apparatus satisfies the elements of at least one claim of each of the asserted patents.

25. The correspondence of each claim element of Claim 1 of the '297 Patent to the TFCU Apparatus is further described below, with the TFCU operation shown in italics.

26. On information and belief, the TFCU Apparatus satisfies the claim elements of the '297 Patent as follows:

“An authentication system for enhancing computer network security by authenticating a user in an electronic communication between a computing device of the user and an online computer system, the authentication system comprising one or more computing devices configured to perform operations comprising:”

*TFCU is a financial institution that provides services through a web site which users can log into. Users can create accounts to access TFCU services. The initial sign-in page is shown below.*





“while the online computer system is connected to the computing device of the user via a communication network, electronically receiving a request for a SecureCode;”

*When attempting to sign in with two-factor (or multi-factor) authentication, TFCU gives the option to send a code via SMS (text) to the user. This changes the login process such that the TFCU online computer system will require a SecureCode, referred to by TFCU as the “one-time code” to successfully authenticate the user. After clicking the “Login” button shown above, the TFCU online computer system receives a request for a SecureCode, generates the SecureCode, and sends it to the user electronically via text, email, or other method for communications of the SecureCode. The user is then prompted to enter that secure code. Instructions relating to this process are provided by TFCU on the TFCU website, as shown below.*

### **How to enable using Home Banking**

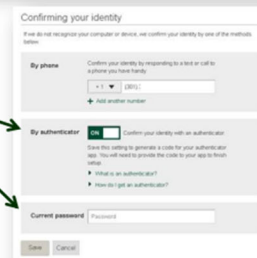
1. **Login to Home Banking and select My Profile.**



2. **Go to Login & Security then select Edit next to Security Options.**



3. **Under Confirming your Identity, adjust the ON/OFF bar to ON under authenticator. Enter your password in the Current Password field. Then Save.**



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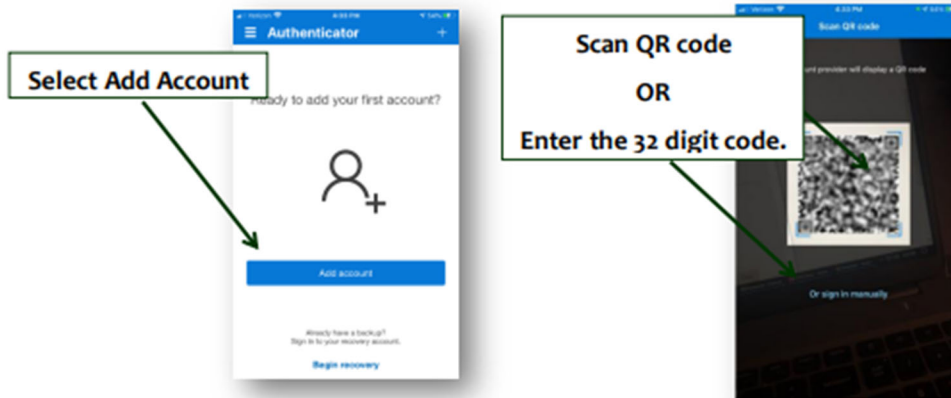
“generating the Secure code;”

*The TFCU online computer system generates a SecureCode, referred to by TFCU as the “One-Time Code.”*

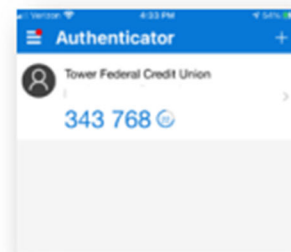
4. You will then see a QR code and 32 digit code on the screen.



5. Open the authenticator app on your mobile device.  
*Do not close the webpage with the QR code.*



6. You should now see your authenticator app generating codes.



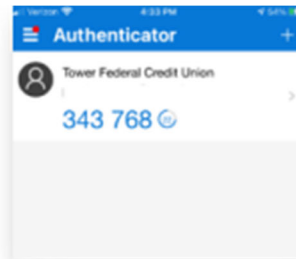
“while the online computer system is connected to the computing device of the user via the communication network, electronically providing to the user the SecureCode in response to the request for the SecureCode, wherein:”

*The TFCU online computer system sends the SecureCode to the user after the user initiates the login process.*

“the SecureCode is invalid after a predetermined time passes,”

*The TFCU website rejects the SecureCode if it the SecureCode is not used within a predetermined time. As shown below, TFCU advises users that the SecureCode (one-time code) will “only be active for a short period of time.” Upon submitting the code after the period of time has elapsed, the user will be prompted with an error message indicating that the SecureCode is not valid for authenticating the user.*

6. You should now see your authenticator app generating codes.



Tower Federal Credit Union – February 2021

“the SecureCode is invalid after one use of the SecureCode for authentication, and”

*As indicated by the name “one-time code,” the SecureCode is valid for only one use. If the user attempts to login with the a code that has already been used, the user will be prompted with an error message indicating that the SecureCode is not valid for authenticating the user.*

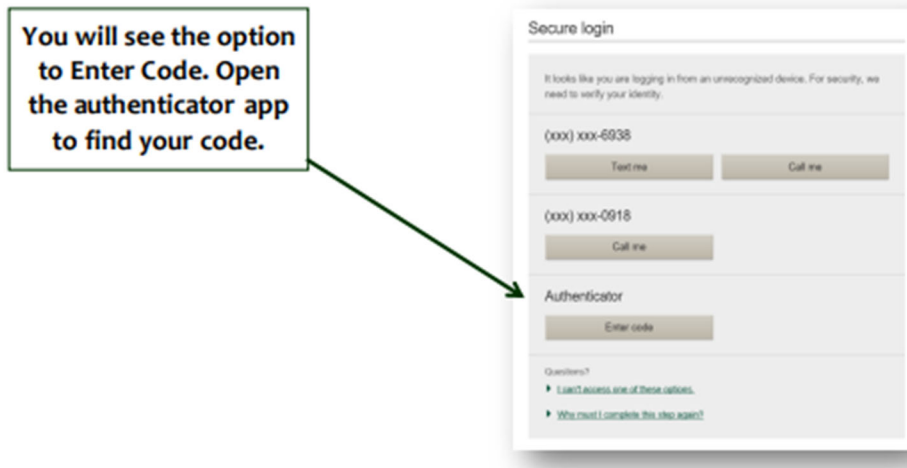
“the SecureCode is only valid for authenticating the user; and

*The SecureCode is generated for the particular user attempting to login; using a SecureCode for a different user does not result in a successful login attempt.”*

“while the online computer system is connected to the computing device of the user via the communication network, electronically receiving from the online computer system a digital authentication request for authenticating the user, wherein:”

*TFCU provides an authentication system which receives a digital identity of the user, including the user’s username and the SecureCode.*

**7. First time login after successful authenticator setup (If you are logging in from an unrecognized device or browser.)**



“the digital authentication request comprises a digital identity of the user, and the digital identity includes the SecureCode; and”

*The request sent to TFCU’s authentication system includes the user’s username, as shown below. The username is part of the user’s digital identity.*

“the digital identity includes the SecureCode; and”

*The SecureCode is sent to the TFCU authentication system along with the username as part of the digital identify associated with the user.*

**7. First time login after successful authenticator setup (If you are logging in from an unrecognized device or browser.)**

**You will see the option to Enter Code. Open the authenticator app to find your code.**

“while the online computer system is connected to the computing device of the user via the communication network, authenticating the user by evaluating a validity of the SecureCode included in the digital authentication request.”

*After the TFCU authentication system receives the digital identity of the user, including the username and the SecureCode, if the SecureCode validates that particular username, then the TFCU authentication system validates the login and allows the user to login to the TFCU application.*

27. Upon information and belief, Defendant has directly infringed one or more of the claims of the Patents-in-Suit under 35 USC 271(a):

*(a) Except as otherwise provided in this title, whoever without authority makes, uses, offers to sell, or sells any patented invention, within the United States or imports into the United States any patented invention during the term of the patent therefor, infringes the patent.*

by engaging in accused activity including making, using, distributing, offering to sell, selling and importing accused products in the United States.

28. Upon information and belief, Defendant has no good faith defense to Plaintiff's infringement allegations.

29. As a result of Defendant's infringement of the Patents-in-Suit, Plaintiff has suffered damages in an amount not yet determined, of at least a reasonable royalty.

**COUNT I  
DIRECT INFRINGEMENT OF U.S. PATENT NO. 8,281,129**

30. The allegations of each of the paragraphs above are hereby re-alleged and incorporated herein by reference.

31. Defendant TFCU has infringed, at least claims 1-52 of the '129 Patent, under 35 U.S.C. § 271(a), by making, using, offering to sell, selling and importing the Accused Products in the United States.

32. Neither Defendant TFCU nor its customers have a license or authority to use the '129 Patent.

33. As a result of Defendant TFCU's infringement of the '129 Patent, Plaintiff has suffered damages in an amount not yet determined, of at least a reasonable royalty.

**COUNT II  
DIRECT INFRINGEMENT OF U.S. PATENT NO. 9,703,938**

34. The allegations of each of the paragraphs above are hereby re-alleged and incorporated herein by reference.

35. Defendant TFCU has infringed, at least claims 1-26 of the '938 Patent, under 35 U.S.C. § 271(a), by making, using, offering to sell, selling and importing the Accused Products in the United States.

36. Neither Defendant TFCU nor its customers have a license or authority to use the '938 Patent.

37. As a result of Defendant TFCU's infringement of the '938 Patent, Plaintiff has suffered and continues to suffer damages in an amount not yet determined, of at least a reasonable royalty.

**COUNT III**  
**DIRECT INFRINGEMENT OF U.S. PATENT NO. 9,727,864**

38. The allegations of each of the paragraphs above are hereby re-alleged and incorporated herein by reference.

39. Defendant TFCU has infringed, at least claims 1-15 of the '864 Patent, under 35 U.S.C. § 271(a), by making, using, offering to sell, selling and importing the Accused Products in the United States.

40. Neither Defendant TFCU nor its customers have a license or authority to use the '864 Patent.

41. As a result of Defendant TFCU's infringement of the '864 Patent, Plaintiff has suffered and continues to suffer damages in an amount not yet determined, of at least a reasonable royalty.

**COUNT IV**  
**DIRECT INFRINGEMENT OF U.S. PATENT NO. 9,870,453**

42. The allegations of each of the paragraphs above are hereby re-alleged and incorporated herein by reference.

43. Defendant TFCU has infringed, at least claims 1-26 of the '453 Patent, under 35 U.S.C. § 271(a), by making, using, offering to sell, selling and importing the Accused Products in the United States.

44. Neither Defendant TFCU nor its customers have a license or authority to use the '453 Patent.

45. As a result of Defendant TFCU' infringement of the '453 Patent, Plaintiff has suffered damages in an amount not yet determined, of at least a reasonable royalty.

**COUNT V**  
**DIRECT INFRINGEMENT OF U.S. PATENT NO. 10,083,285**

46. The allegations of each of the paragraphs above are hereby re-alleged and incorporated herein by reference.

47. Defendant TFCU has infringed, at least claims 1-30 of the '285 Patent, under 35 U.S.C. § 271(a), by making, using, offering to sell, selling and importing the Accused Products in the United States.

48. Neither Defendant TFCU nor its customers have a license or authority to use the '285 Patent.

49. As a result of Defendant TFCU' infringement of the '285 Patent, Plaintiff has suffered damages in an amount not yet determined, of at least a reasonable royalty.

**COUNT VI**  
**DIRECT INFRINGEMENT OF U.S. PATENT NO. 10,769,297**

50. The allegations of each of the paragraphs above are hereby re-alleged and incorporated herein by reference.

51. Defendant TFCU has infringed, at least claims 1-29 of the '297 Patent, under 35 U.S.C. § 271(a), by making, using, offering to sell, selling and importing the Accused Products in the United States.

52. Neither Defendant TFCU nor its customers have a license or authority to use the '297 Patent.

53. As a result of Defendant TFCU's infringement of the '297 Patent, Plaintiff has suffered damages in an amount not yet determined, of at least a reasonable royalty.



**PRAYER FOR RELIEF**

A. For a judgement declaring that Defendant has infringed each of the Patents-in-Suit.

B. For a judgment awarding Plaintiff compensatory damages as a result of Defendant's infringement sufficient to reasonably and entirely compensate Plaintiff for infringement of the Patents-in-Suit in an amount to be determined;

C. For a judgment declaring that this case is exceptional and awarding Plaintiff its expenses, costs and attorneys' fees in accordance with 35 U.S.C. § 285 and Rule 54(d) of the Federal Rules of Civil Procedure;

D. For a judgment awarding Plaintiff prejudgment interest pursuant to 35 U.S.C. § 284, and a further award of post judgment interest, pursuant to 28 U.S.C. § 1961, continuing until such judgment is paid;

E. For a judgment awarding Plaintiff enhanced damages under 35 U.S.C. § 284; and

F. For such other relief to which Plaintiff is entitled under the applicable United States laws and regulations or as this Court deems just and proper.

**DEMAND FOR JURY TRIAL**

Pursuant to the Federal Rules of Civil Procedure Rule 38(b), Plaintiff hereby demands trial by jury as to all claims in this litigation.

Dated: May 4, 2024

Respectfully submitted,

/s/ Joseph J. Zito

Joseph J. Zito

DNL ZITO

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Washington, DC 20036

202-466-3500

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